

AMENDMENTS TO THE CLAIMS

Claim 1 (Canceled)

2. (Previously Presented) An engine fuel injection apparatus, comprising:
an air chamber provided on an upstream end of an air intake passage of an engine;
and
a fuel injection valve for injecting fuel toward the upstream end of the air intake passage, said fuel injection valve being provided on a wall of said air chamber facing a wall connected to the upstream end of the air intake passage,
wherein all fuel piping and wiring to and from said fuel injection valve are located outside of said air chamber.

3. (Currently Amended) ~~The~~ An engine fuel injection apparatus ~~according to claim 1, apparatus, comprising:~~
an air chamber provided on an upstream end of an air intake passage of an engine;
and
a fuel injection valve for injecting fuel toward the upstream end of the air intake passage, said fuel injection valve being provided on a wall of said air chamber facing a wall connected to the upstream end of the air intake passage,
wherein said fuel injection valve includes at least an ejection port thereof located inside said air chamber, and

wherein the fuel injection valve provided on the wall of said air chamber is a first fuel injection valve for high-speed operation of the engine, and the air intake passage is provided with a second fuel injection valve for low-speed operation of the engine.

4. (Original) The engine fuel injection apparatus according to claim 2, wherein the fuel injection valve provided on the wall of said air chamber is a first fuel injection valve for high-speed operation of the engine, and the air intake passage is provided with a second fuel injection valve for low-speed operation of the engine.

5. (Currently Amended) ~~The~~ An engine fuel injection apparatus according to ~~claim 1,~~ apparatus, comprising:

an air chamber provided on an upstream end of an air intake passage of an engine;
and

a fuel injection valve for injecting fuel toward the upstream end of the air intake passage, said fuel injection valve being provided on a wall of said air chamber facing a wall connected to the upstream end of the air intake passage,

wherein said fuel injection valve includes at least an ejection port thereof located inside said air chamber, and

wherein said air chamber also serves as an air cleaner case having a filter element therein.

6. (Original) The engine fuel injection apparatus according to claim 2, wherein said air chamber also serves as an air cleaner case having a filter element therein.

7. (Original) The engine fuel injection apparatus according to claim 3, wherein said air chamber also serves as an air cleaner case having a filter element therein.

8. (Original) The engine fuel injection apparatus according to claim 4, wherein said air chamber also serves as an air cleaner case having a filter element therein.

Claim 9 (Canceled)

10. (Original) The engine fuel injection apparatus according to claim 2, wherein the wall of said air chamber is provided with an electric component in the vicinity of said fuel injection valve for controlling said fuel injection valve.

11. (Original) The engine fuel injection apparatus according to claim 3, wherein the wall of said air chamber is provided with an electric component in the vicinity of said first fuel injection valve for controlling said fuel injection valve.

12. (Original) The engine fuel injection apparatus according to claim 4, wherein the wall of said air chamber is provided with an electric component in the vicinity of said fuel first injection valve for controlling said fuel injection valve.

13. (Original) The engine fuel injection apparatus according to claim 5, wherein an inspection port is formed on a portion of a wall of the air chamber where the fuel injection valve is not provided, and the inspection port is covered with a removable lid.

14. (Original) The engine fuel injection apparatus according to claim 6, wherein an inspection port is formed on a portion of a wall of the air chamber where the fuel injection valve is not provided, and the inspection port is covered with a removable lid.

15. (Original) The engine fuel injection apparatus according to claim 7, wherein an inspection port is formed on a portion of a wall of the air chamber where the fuel injection valve is not provided, and the inspection port is covered with a removable lid.

16. (Original) The engine fuel injection apparatus according to claim 8, wherein an inspection port is formed on a portion of a wall of the air chamber where the fuel injection valve is not provided, and the inspection port is covered with a removable lid.

Claims 17-21. (Canceled)

22. (Currently Amended) The fuel injection apparatus according to claim ~~[[1]]~~ 3, wherein all fuel piping and wiring to and from said fuel injection valve are located outside of said air chamber.

Claim 23. (Canceled)

24. (Currently Amended) ~~The~~ An engine fuel injection apparatus ~~according to claim 1, apparatus, comprising:~~

an air chamber provided on an upstream end of an air intake passage of an engine;

and

a fuel injection valve for injecting fuel toward the upstream end of the air intake passage, said fuel injection valve being provided on a wall of said air chamber facing a wall connected to the upstream end of the air intake passage; and

~~further comprising~~ a fuel pump,

wherein said fuel injection valve includes at least an ejection port thereof located inside said air chamber, and

wherein fuel feed pipes from the fuel pump and the fuel injection valve extend through a gap between a rear wall of the air chamber and a front wall of a fuel tank.

25. (New) The engine fuel injection apparatus according to claim 2, further comprising a fuel pump, wherein fuel feed pipes from the fuel pump and the fuel injection valve extend through a gap between a rear wall of the air chamber and a front wall of a fuel tank.

Claim 26 (Canceled)

27. (Previously Presented) An engine fuel injection apparatus, comprising:
an air chamber provided on an upstream end of an air intake passage of an engine;
a first fuel injection valve for injecting fuel toward the upstream end of the air intake passage, said fuel injection valve being provided on a wall of said air chamber facing a wall connected to the upstream end of the air intake passage;
a second fuel injection valve disposed on said air intake passage.

28. (Currently Amended) The engine fuel injection apparatus according to claim 27, wherein the ~~fuel injection valve provided on the wall of said air chamber is a~~ first fuel injection valve is for high-speed operation of the engine, and the ~~air intake passage is provided with a~~ second fuel injection valve is for low-speed operation of the engine.

29. (Previously Presented) The engine fuel injection apparatus according to claim 27, wherein said air chamber also serves as an air cleaner case having a filter element therein.

30. (Previously Presented) The engine fuel injection apparatus according to claim 27, wherein the wall of said air chamber is provided with an electric component in the vicinity of said fuel injection valve for controlling said fuel injection valve.

31. (Previously Presented) The engine fuel injection apparatus according to claim 29, wherein an inspection port is formed on a portion of a wall of the air chamber where the fuel injection valve is not provided, and the inspection port is covered with a removable lid.

Claim 32 (Canceled)

33. (Currently Amended) ~~The~~ An engine fuel injection apparatus according to ~~claim 32, apparatus, comprising:~~

an air chamber provided on an upstream end of an air intake passage of an engine;
a first fuel injection valve for injecting fuel toward the upstream end of the air intake
passage, said fuel injection valve being provided on a wall of said air chamber facing a wall
connected to the upstream end of the air intake passage;

a second fuel injection valve disposed at a level lower than said first fuel injection valve,

~~wherein the fuel injection valve provided on the wall of said air chamber is a first fuel injection valve~~ is for high-speed operation of the engine, and the ~~air intake passage is provided with a second fuel injection valve~~ is for low-speed operation of the engine.

34. (Currently Amended) The engine fuel injection apparatus according to claim [[32]] 33, wherein said air chamber also serves as an air cleaner case having a filter element therein.

35. (Currently Amended) The engine fuel injection apparatus according to claim [[32]] 33, wherein the wall of said air chamber is provided with an electric component in the vicinity of said fuel injection valve for controlling said fuel injection valve.

36. (Original) The engine fuel injection apparatus according to claim 34, wherein an inspection port is formed on a portion of a wall of the air chamber where the fuel injection valve is not provided, and the inspection port is covered with a removable lid.

37. (New) The engine fuel injection apparatus according to claim 3, wherein said first and second fuel injection valves cooperate with the same air intake passage, and only the second fuel injection valve is used when the engine is in the low-speed operation and

the first and second fuel injection valves are used when the engine is in the high-speed operation.

38. (New) The engine fuel injection apparatus according to claim 4, wherein said first and second fuel injection valves cooperate with the same air intake passage, and only the second fuel injection valve is used when the engine is in the low-speed operation and the first and second fuel injection valves are used when the engine is in the high-speed operation.

39. (New) The engine fuel injection apparatus according to claim 27, wherein said first and second fuel injection valves cooperate with the same air intake passage, and only the second fuel injection valve is used when the engine is in a low-speed operation and the first and second fuel injection valves are used when the engine is in a high-speed operation.

40. (New) The engine fuel injection apparatus according to claim 33, wherein said first and second fuel injection valves cooperate with the same air intake passage, and only the second fuel injection valve is used when the engine is in the low-speed operation and the first and second fuel injection valves are used when the engine is in the high-speed operation.

41. (New) The engine fuel injection apparatus according to claim 3, wherein said second fuel injection valve is disposed on said air intake passage at a location downstream from a throttle valve of the engine, said second fuel injection valve injecting fuel toward the downstream end of the air intake passage.

42. (New) The engine fuel injection apparatus according to claim 4, wherein said second fuel injection valve is disposed on said air intake passage at a location downstream from a throttle valve of the engine, said second fuel injection valve injecting fuel toward the downstream end of the air intake passage.

43. (New) The engine fuel injection apparatus according to claim 27, wherein said second fuel injection valve is disposed on said air intake passage at a location downstream from a throttle valve of the engine, said second fuel injection valve injecting fuel toward the downstream end of the air intake passage.

44. (New) The engine fuel injection apparatus according to claim 33, wherein said second fuel injection valve is disposed on said air intake passage at a location downstream from a throttle valve of the engine, said second fuel injection valve injecting fuel toward the downstream end of the air intake passage.